WHAT IS CLAIMED IS:

1.   A bandgap voltage reference circuit comprising:

a first circuit providing a first voltage substantially proportional to V_{be} of a first bipolar transistor;

a second circuit providing a second voltage ΔV_{be} substantially proportional to the difference of two V_{be} voltages of two bipolar transistors; and

a comparator having respective inputs coupled to V_{be} and ΔV_{be} and an output coupled to the base of the first bipolar transistor whereby a voltage substantially proportional to the sum of respective constants multiplying V_{be} and ΔV_{be} is provided at the output of the comparator.

2.   A bandgap voltage reference circuit comprising:

a first bipolar transistor providing substantially a reference voltage V_{be};

a current mirror circuit comprising two bipolar transistors coupled in a current mirror arrangement for providing a voltage difference ΔV_{be} comprising substantially a difference signal between the respective V_{be} voltages of the two bipolar transistors; and

a comparator having respective inputs coupled to V_{be} and ΔV_{be} and an output coupled to the base of the first bipolar transistor whereby a voltage substantially proportional to the sum of respective constants multiplying V_{be} and ΔV_{be} is provided at the output of the comparator.

3.   A bandgap voltage reference circuit comprising:

a first circuit providing a first voltage substantially proportional to V_{be} of a first bipolar transistor;

a second circuit providing a second voltage ΔV_{be} substantially proportional to the difference of two V_{be} voltages of two bipolar transistors; and

a comparator having respective inputs coupled to V_{be} and ΔV_{be} and an output coupled to the base of the first bipolar transistor whereby a substantially temperature independent voltage refererence is provided at the output of the comparator.